

## Annex 1: Alignment SEQ ID:29 vs Cao SEQ ID:6

CLUSTAL 2.0.10 multiple sequence alignment

SEQID29 CAOSEQID6	MEDLDQSPLVSSSDSPRPQPAFKYQFVREPEDEEEEEEEDEDDEDLEELEVLERKPA 60 MEDLDQSPLVSSSDSPRPQPAFKYQFVREPEDEEEEEEEDEDDEDLEELEVLERKPA 60 *****
SEQID29 CAOSEQID6	AGLSAAPVPTAPAAGAPLMDFGNDFPVPPAPRGPLAAPPVAPERQPSWDPSPVSSVPAP 120 AGLSAAPVPTAPAAGAPLMDFGNDFPVPPAPRGPLAAPPVAPERQPSWDPSPVSSVPAP 120 *****
SEQID29 CAOSEQID6	SPLSAAAVSPSKLPEDDEPPARPPPPPASVSPQAEVWTPPAPAPAAPPSTPAAPKRRG 180 SPLSAAAVSPSKLPEDDEPPARPPPPPASVSPQAEVWTPPAPAPAAPPSTPAAPKRRG 180 *****
SEQID29 CAOSEQID6	SSGAVVXXXXXIMDLKEQPGNTISAGQEDFPSVLETAASXPSSLPLSAASFKEHEYLGN 240 SSGSVV----- 186 ***;**
SEQID29 CAOSEQID6	LSTVLPTEGTLQENVSEASKEVSEAKTLLIDRDLTEFSELEYSEMSSFSVSPKAESAV 300 -----
SEQID29 CAOSEQID6	IVANPREEIIIVNKDEEEKLVSNNLHQQELPTALTKLVEDEVVSEKAKDSFNEKRV 360 -----
SEQID29 CAOSEQID6	AVEAPMREEYADFKPFERVWEVKDSKEDSDMLAAGGKIESNLESKVDKKCFADSLEQTNH 420 -----
SEQID29 CAOSEQID6	EKDSESSNDDTSPPSTPEGIKDRSGAYITCAPFNPAATESIATNIFPLLEDPTSENXTDE 480 -----
SEQID29 CAOSEQID6	KKIEEKKAQIVTEKNTSTKTSNPFFVAAQDSETDYVTTDNLTKVTEEVVANMPEGLTPDL 540 -----
SEQID29 CAOSEQID6	VQEACESELNEVTGKIAVETKMDLVQTSEVMQESLYPAAQLCPSEEEATPSPVLPDI 600 -----
SEQID29 CAOSEQID6	VMEAPLNSAVPSAGASVIQPSSPLEASSVNYESIKHEPENPPPYEEAMSVSLKVGKIE 660 -----
SEQID29 CAOSEQID6	EIKEPENINAALQETEAPYISIACDLIKETKLSAEPAPPDFSDYSEMAKVEQPVPDHSELV 720 -----
SEQID29 CAOSEQID6	EDSSPDSEPVDLFSDDSIPDVPQKQDETVMLVKESLTETSFESMIEYENKEKLSALPPEG 780 -----
SEQID29 CAOSEQID6	GKPYLESFKLSDLNTKDTLLPDEVSTLSKKEKIPLQMEELSTAVYSNDDLFISKEAQIRE 840 -----
SEQID29 CAOSEQID6	TETFSDSPIEIIDEPPTLISSKTDTSFSKLAREYTDLEVSHKSEIANAPDGAGSLPCTEL 900 -----
SEQID29 CAOSEQID6	PHDLSLKNIQPKVEEKISFSDDFSKNGSATSKVLLPPDVSALGHTQAEIESIVKPKVLE 960 -----
SEQID29 CAOSEQID6	KEAEKKLPSDTEKEDRSPSAIFSAADLGKTSVVDLLYWRDIKKTGVVFGASLFLLSLTVF 1020 -----VDLLYWRDIKKTGVVFGASLFLLSLTVF 215 *****
SEQID29 CAOSEQID6	SIVSVTAYIALALLSVTISFRIYKGVIQAIQKSDEGHPFRAYLESEVAISEELVQKYSNS 1080 SIVSVTAYIALALLSVTISFRIYKGVIQAIQKSDEGHPFRAYLESEVAISEELVQKYSNS 275 *****

SEQID29 ALGHVNCTIKEELRRFLVDDLVDSSLKFAVLMWVFTYVGALFNGLTLLILALISLFSVPVI 1140  
CAO ALGHVNCTIKEELRRFLVDDLVDSSLKFAVLMWVFTYVGALFNGLTLLILALISLFSVPVI 335  
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SEQID29 YERHQAQIDHYLGLANKNVKDAMAKIQAKIPGLKRKAE 1178  
CAO YERHQAQIDHYLGLANKNVKDAMAKIQAKIPGLKRKAE 373  
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